2. Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-11 *(Cancelled)*

Claim 12. (*Withdrawn*) A method of preparing a dendritic cell population comprising the steps of:

(a) contacting hematopoietic stem or progenitor cells with flt3-ligand in an amount sufficient to generate a dendritic cell population;

(b) transfecting the dendritic cells with a gene encoding an antigen; and

(c) allowing the dendritic cells to process and express the antigen.

Claim 13. (*Withdrawn*) A method according to claim 12, further comprising contacting the hematopoietic stem or progenitor cells with a molecule selected from the group consisting of GM-CSF, IL-4, TNF-α, IL-3, c-kit ligand, fusions of GM-CSF and IL-3, CD40 ligand, and CD40 antibody.

Claim 14 *(Cancelled)*

Claim 15 *(Previously presented)* A method of preparing a dendritic cell population comprising the steps of:

(a) contacting hematopoietic stem or progenitor cells with a growth factor or cytokine, wherein the growth factor or cytokine consists of flt3-ligand in an amount sufficient to generate a dendritic cell population;

(b) exposing the dendritic cells to an antigen; and

(c) allowing the dendritic cells to process and express the antigen.

Claim 16 *(Currently amended)* ~~The method according to claim 15, wherein the growth factor or cytokine consists of fl3 ligand and GM-CSF.~~

A method of preparing a dendritic cell population comprising the steps of:

(a) contacting hematopoietic stem or progenitor cells with a growth factor or cytokine, wherein the growth factor or cytokine consists of flt3-ligand and GM-CSF in amounts sufficient to generate a dendritic cell population;

(b) exposing the dendritic cells to an antigen; and

(c) allowing the dendritic cells to process and express the antigen.

Claim 17 (*Withdrawn*) The method according to claim 12 wherein the flt3-ligand is a recombinant human flt3-ligand.

Claim 18. (*Withdrawn*) The method according to claim 13 wherein the flt3-ligand is a recombinant human flt3-ligand.

Claim 19. (*Withdrawn*) The method according to claim 13 wherein the molecule is a recombinant human GM-CSF.

Claim 20. (*Withdrawn*) The method according to claim 13 wherein the molecule is CD40 ligand.

Claim 21. (*Withdrawn*) The method according to claim 13 wherein the molecule is c-kit ligand.

Claim 22. (*Withdrawn*) The method according to claim 13 wherein the molecule is TNF-α.

Claim 23 (*Previously presented*) The method according to claim 15 wherein the flt3-ligand is human flt3-ligand.

Claim 24 (*Previously presented*) The method according to claim 16 wherein the flt3-ligand is human flt3-ligand.

Claim 25 (*Previously presented*) The method according to claim 16 wherein the GM-CSF is human GM-CSF.

Claim 26. (*Withdrawn*) The method according to claim 16 wherein the molecule is CD40 ligand.

Claim 27. (*Withdrawn*) The method according to claim 16 wherein the molecule is c-kit ligand.

Claim 28. (*Withdrawn*) The method according to claim 16 wherein the molecule is TNF-α.

Claim 29 (*Previously presented*) A method of preparing a dendritic cell population, the method comprising contacting in vitro hematopoietic stem or

progenitor cells with a growth factor or cytokine, wherein the growth factor or cytokine consists of flt3-ligand in an amount sufficient to generate a dendritic cell population, thereby generating the dendritic cell population.

Claim 30 *(Canceled)* The method of claim 29, wherein the hematopoietic stem or progenitor cells have been enriched for the CD34+ phenotype.

Claim 31 *(Currently amended)* ~~The method of claim 29, wherein the growth factor or cytokine consists of flt3-ligand and GM-CSF.~~
A method of preparing a dendritic cell population, the method comprising contacting in vitro hematopoietic stem or progenitor cells with a growth factor or cytokine, wherein the growth factor or cytokine consists of flt3-ligand and GM-CSF in amounts sufficient to generate a dendritic cell population, thereby generating the dendritic cell population.

Claim 32 *(Previously presented)* The method of claim 31, wherein the GM-CSF is human GM-CSF.

Claim 33. *(Withdrawn)* The method of claim 31, wherein the molecule is TNF-α.

Claim 34. *(Withdrawn)* The method of claim 31, wherein the molecule is c-kit ligand.

Claim 35. *(Withdrawn)* The method of claim 31, wherein the molecule is CD40 ligand.

Claim 36 *(Previously presented)* The method according to claim 29 wherein the flt3-ligand is human flt3-ligand.

Claim 37 *(New)* The method according to claim 31, wherein the flt3-ligand is human flt3-ligand.

Claim 38 *(New)* The method of claims 15, 16, 29, and 31, wherein the hematopoietic stem or progenitor cells have been enriched for the CD34+ phenotype.